



P.O. Box 625, Rt. 331S, Millsboro, DE 19966

November 4, 2009

Allen McCloskey  
Sr. Environmental Compliance Specialist  
Division of Water Resources  
DNREC  
89 Kings Highway  
Dover, DE 19966

RE: DE0000736 – BOD limit exceedences (summary)

Dear Allen:

This letter is a summary of our BOD exceedences from 10/13/09-10/25/09. As stated in the previous letter from 10/23/09 we had BOD results of >29.7mg/l and >29.6mg/l on 10/13/09. I called Glenn on 10/19/09 and he instructed me to do a 24 hour composite then and again later in the week, using a smaller dilution to eliminate the possibility of a result of >. We had to stop flow due to turbidity issues on the 19<sup>th</sup> but the sampler was set up on the 20<sup>th</sup>. I was only able to get an 11 hour composite due to sludge blanket issues but I did BOD's on the 11 hour composite and the result was 405 mg/l. A 24 hour composite sample was obtained on October 21<sup>st</sup>-October 22<sup>nd</sup>. The result was 264 mg/l. The second requested 24 hour composite was done October 25<sup>th</sup> - October 26<sup>th</sup>. The result was 39.95 mg/l, back in compliance. I called you on October 26, 2009 with the results from October 20<sup>th</sup>. You requested daily sampling and this summary letter instead of individual letters. Glenn was notified on October 27<sup>th</sup> of the result from the 21<sup>st</sup>. Composite samples were taken daily thru October 30<sup>th</sup> either by myself or Envirocorp Labs Inc. The results from October 26<sup>th</sup> and 27<sup>th</sup> were 27.2 mg/l and 25.3mg/l respectively.

I believe the main culprits to the high BOD's to be the seasonal shift from green produce to more process stock, the processing of seasonal sweet items and the liquid sucrose leak from a sugar tank.

During this time we enlisted the help of Jane Keller, our Chemtreat rep., and Rick Marshal of the METC group. We have used Rick in the past as he works with Dr. Richards from more of an operational stand point. After discovering the low PH in the aeration basin after the sugar leak Jane and I contacted Rick and his suggestions were to maximize air to the Aeration basin, maintain a ph of 7.5 in the Aeration and raise the EB ph to make the food easier for the bugs to consume. This was achieved by using bead and liquid caustic, both to the aeration and the EB until things stabilized. A sample of the MLSS was also sent to Dr. Richards. I sent you a copy of his evaluation. Also from the

time we had the test results stating our exceedence to the present we have enlisted 2 Maintenance Supervisors, Plant Manager, our sanitation supervisor, 2<sup>nd</sup> shift warehouse/tank yard supervisor and our third shift maintenance crew leader to assist in monitoring a few parameters such as Aeration ph, Clarifier turbidity, sludge blanket level and chemical feed pump status on an hourly basis to ensure that no other issues arose.

Looking forward we plan to:

- Do additional monitoring of our EB BOD's to try and find a correlation between what we pack and the loading from those items and come up with a not to exceed / week or / day number for certain high strength waste streams.
- Always do a small dilution on our effluent BOD so as to not have a > result
- Install a ph probe at the in feed end of the aeration basin to get an early warning if the ph drops radically
- Cabe has already been in to look at a storage tank for drum stock brine so we can feed it at a constant rate to the aeration and achieve some balance.
- The sugar tank leak has been repaired and added as a daily spot to check for certain individuals.

Using the additional EB monitoring data and the storage tank along with a few changes to our production scheduling should eliminate this problem in the future.

Any questions or concerns, please call me.

Sincerely,



Bob Lynch  
Environmental/Wastewater Supervisor  
(302)934-3833